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November 6, 1989

TO: Minerals File

FROM: Holland Shepherd, Reclamation Specialist HJS

RE: Carr Fork Site Inspection, Anaconda Minerals, M/045/004, Tooele County, Utah

Wayne Hedberg and I visited the Carr Fork site on November 6, 1989. We met with Mr. Joe Jarvis of JBR Consultants on site. The visit was conducted to inspect reclamation success at the site. This fall, 1989, marks the 3rd season of revegetation growth at this site and the operator is looking for a release, from the Division, from their reclamation agreement.

Apparently, Anaconda requested that the Division review and approve the Mining and Reclamation Plan for the entire site which includes both the Carr Fork property and the, pre-law, I S & R properties or smelter site. Anaconda made this request to alleviate the concerns of the State Health Department and the Environmental Protection Agency regarding the escape of hazardous substances from the site via dust and water vectors (see attached letter from Anaconda dated July 26, 1985).

The State Health Department wrote a letter to the Division (attached), dated June 18, 1986, explaining that they had reviewed the Mining and Reclamation Plan, and that it conceptually addressed the containment problems they were concerned about. In other words, if implemented correctly, the proposed reclamation of the site should eliminate the need to elect the Carr Fork site for the Superfund Program.

Although the greater portion of the site contains above standard vegetation, several areas, on the east half, contain little to no vegetation. The first area we encountered, and the one I am most concerned with, is located by the old landfill. It consists of a 2 acre bald spot on top of a ridge. Some planted species are growing, but the seeded species are not. The soil, taken from a borrow area, appears good. One explanation for the lack of seeded species is a problem with the drill seeder clogging. There are very distinct lines of demarcation between healthy growing rows of plants and bare ground. The area does not appear eroded or unstable. This area is of concern because it covers the old landfill, and lack of a

good vegetation cover could result in the exposure of undesirable material in later years.

The other areas where revegetation has been a problem, are found in the area of the old I S & R smelter site. These areas are found almost predominantly on the southwest sides of the sediment control dikes 4, 3 and 2, or upstream side. Where water has ponded in past years, seeded plants have not grown. Some invader species are starting to come in now, like willow and tamarisk. There are other small areas, 1 to .5 acres in size, where the seeded species have not grown. Again, this may have been a problem during the initial seeding where the drill seeder clogged. Seeded areas around these poor ones are growing vigorously.

We asked that JBR perform some basic soils analyses on these problem areas for pH and sulfate. We also asked that the area above the landfill should be reseeded. The areas on the old smelter site could be left to natural invasion, provided the soils analyses do not indicate anything detrimental in the soil.

The best explanation for lack of vegetation on these areas, according to Joe Jarvis, is the character of the soil itself. When dry, it becomes very hard surfaced and difficult to penetrate by seeds blown or washed onto bare sites. The lack of moisture over the last two seasons, has caused the surface of these soils to remain hardened, and inhibited natural colonization because of moisture stress.

The operator was working on the repair of several large erosion gullies that had impacted the tailings pond reclamation. They occurred right after the reclamation had been completed in 1986, when no vegetation was yet in place to control runoff. Overall the tailings pond reclamation is very successful.

It is my recommendation that once Anaconda/JBR has performed the tasks explained above, the Division release them from any further revegetation obligations at this site. I also recommend we discuss the content of the attachments to this memo and develop any further game plan for this site based on their content, and the results of the reclamation. Overall the site has an excellent vegetative cover. My concerns are more towards surface and groundwater problems that might still be generated at this site, and I suggest we take a closer look at these before completely releasing the operator from our agreement.

jb
Attachments
cc: Lowell Braxton
Wayne Hedberg
MN4/180-181